

WORLD INTELLECTUAL PROPERTY ORGANIZATION International Bureau



INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(51) International Patent Classification 6:

A61K 48/00, 39/395, 38/00, 35/00, C12N 15/63, 15/85, 15/86

(11) International Publication Number: WO 99/61065 (43) International Publication Date: 2 December 1999 (02.12.99)

(21) International Application Number: PCT/US99/11419

(22) International Filing Date: 21 May 1999 (21.05.99)

(30) Priority Data: 60/086,625 23 May 1998 (23.05.98) US

(71) Applicants: LEIDEN UNIVERSITY MEDICAL CENTER [NL/NL]; Dept. of Immunohematology and Bloodbank, Albinusdreef 2, P.O. Box 9600, NL-Leiden (NL). TANOX, INC. [US/US]; 10301 Stella Link, Houston, TX 77025 (US).

(72) Inventors: MELIEF, Cornelis, J., M.; Wilhelmin a park 33, NL-2012 KC Haarlem (NL). OFFRINGA, Rienk; Stieltjesstraat 63, NL-2313 SJ Leiden (NL). TOES, Rene; Marco Polostraat 73 III, NL-1057 WN Amsterdam (NL). SCHOENBERGER, Stephen, P.; 259 Coneflower Street, Encinitas, CA 92024 (US). DE BOER, Mark; NL-1261 BT Blaricum (NL).

(74) Agent: MIRABEL, Eric; 10301 Stella Link, Houston, TX 77025 (US).

(81) Designated States: AL, AM, AU, AZ, BA, BB, BG, BR, BY, CA, CN, CU, CZ, EE, GE, GH, GM, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, RO, RU, SD, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZW, ARIPO patent (GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG).

Published

With international search report.

(54) Title: CD40 BINDING MOLECULES AND CTL PEPTIDES FOR TREATING TUMORS

(57) Abstract

Disclosed is a method and composition for treating tumors or infectious diseases, wherein the composition includes CD40 binding molecules together with CTL-activating peptides, e.g., tumor antigens. Such compostion is useful for enhancing the anti-tumor affect of a peptide tumor vaccine, or for otherwise activating CTLs so that the activated CTLs can act against tumurous or infected cells. The CD40 binding molecules can include antibody molecules, as well as homologues, analogues and modified or derived forms thereof, including immunoglobulin fragments like Fab, (Fab')2 and Fv, as well as other molecules including peptides, oligonucleotides, peptidomimetics and organic compounds which bind to CD40 and activate the CTL response.